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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (currently amended): A process for manufacturing an integrated circuit package comprising:

mounting a semiconductor die to a first surface of a substrate;

mounting a die adapter to said semiconductor die;

wire bonding said semiconductor die to ones of conductive traces at said first surface of said substrate;

mounting at least one collapsible spacer to at least one of a heat spreader, said die adapter and said substrate;

placing one of said heat spreader and said substrate on a surface of a lower mold die;

releasably clamping the other of said heat spreader and said substrate to an upper mold die of said mold cavity, such that said other of said heat spreader and said substrate is in contact with said upper mold die and said collapsible spacer is disposed and compressed between said heat spreader and said substrate to thereby press said one of said heat spreader and said substrate against said surface of said lower mold die;

molding the semiconductor die, the substrate, the wire bonds, said die adapter, said at least one collapsible spacer and said heat spreader into a molding compound by molding in a mold cavity between said ~~other of said heat spreader and said substrate and said surface of the lower mold die~~, resulting in a molded package having said at least a portion of said substrate exposed and at least a portion of said heat spreader exposed from said molded package prior to singulating;

forming a ball grid array on a second surface of said substrate, bumps of said

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ball grid array being electrically connected to said conductive traces; and
singulating said integrated circuit package.

Claim 2 (previously presented): The process according to claim 1, wherein said placing one of said heat spreader and said substrate in a mold cavity comprises placing said heat spreader in said mold cavity such that said heat spreader rests on said surface of said lower mold die.

Claim 3 (previously presented): The process according to claim 2, wherein said releasably clamping comprises releasably clamping said substrate to said upper die of said mold.

Claim 4 (previously presented): The process according to claim 1, wherein said placing one of said heat spreader and said substrate on a surface of a lower mold die comprises placing said substrate in said mold cavity such that said substrate rests on said surface of said lower mold die.

Claim 5 (previously presented): The process according to claim 4, wherein said releasably clamping comprises releasably clamping said heat spreader to said upper die of said mold.

Claim 6 (original): The process according to claim 1, wherein said wire bonding further comprises ground wire bonding said semiconductor die to said die adapter.

Claim 7 (previously presented): The process according to claim 1, wherein said wire bonding further comprises ground wire bonding said semiconductor die to at least one ground pad on said substrate.

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Claim 8 (original): The process according to claim 1, wherein said mounting at least one collapsible spacer comprises mounting said at least one collapsible spacer to said substrate.

Claim 9 (original): The process according to claim 1, wherein said mounting at least one collapsible spacer comprises mounting said at least one collapsible spacer to said heat spreader.

Claim 10 (original): The process according to claim 1, wherein said at least one collapsible spacer comprises a plurality of collapsible spacers, and mounting said at least one collapsible spacer comprises mounting one of said plurality of collapsible spacers to said die adapter and mounting at least another of said collapsible spacers to said substrate.

Claim 11 (previously presented): The process according to claim 10, wherein said one of said plurality of collapsible spacers is disposed between said die adapter and said heat spreader and in contact with said die adapter and said heat spreader during molding.

Claim 12 (original): The process according to claim 10, wherein said at least another of said collapsible spacers is disposed in contact with said heat spreader during molding.

Claim 13 (currently amended): A process for manufacturing a plurality of integrated circuit packages comprising:
mounting a plurality of semiconductor dice to a first surface of a substrate array;
mounting a plurality of die adapters to said semiconductor dice such that each one of said die adapters is mounted to a corresponding one of said semiconductor dice;

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wire bonding said semiconductor dice to ones of conductive traces at said first surface of said substrate array;

mounting a plurality of collapsible spacers to one of a heat spreader array and said substrate array;

placing one of said heat spreader array and said substrate array on a surface of a lower mold die;

releasably clamping the other of said heat spreader array and said substrate array to an upper mold die such that said other of said heat spreader array and said substrate array is in contact with said upper mold die and said collapsible spacers are disposed and compressed between said heat spreader array and said substrate array to thereby press said one of said heat spreader array and said substrate array against said surface of said lower mold die;

molding the semiconductor dice, said substrate array, said wire bonds, said die adapters, said spacers and said heat spreader array into a molding compound by molding in a mold cavity ~~between said other of said heat spreader array and said substrate array and said surface of the lower mold die~~, resulting in an array of molded packages having said substrate array exposed and at least a portion of said heat spreader array exposed from said array of molded packages prior to singulating;

forming a plurality of ball grid arrays on a second surface of said substrate array, bumps of said ball grid arrays being electrically connected to said conductive traces; and

singulating each integrated circuit package from said array of molded packages.

Claim 14 (previously presented): The process according to claim 13, wherein said placing one of said heat spreader array and said substrate array on a surface of a lower mold die comprises placing said heat spreader array in said mold cavity such that said heat spreader array rests on said surface of said lower mold die of said mold.

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Claim 15 (previously presented): The process according to claim 14, wherein said releasably clamping comprises releasably clamping said substrate array to the upper mold die of said mold.

Claim 16 (previously presented): The process according to claim 13, wherein said placing one of said heat spreader array and said substrate array on a surface of a lower mold die comprises placing said substrate array in said mold cavity such that said substrate array rests on said surface of said lower mold die of said mold.

Claim 17 (previously presented): The process according to claim 16, wherein said releasably clamping, comprises releasably clamping said heat spreader array to the upper mold die of said mold.

Claim 18 (original): The process according to claim 13, wherein said wire bonding further comprises ground wire bonding each of said die adapters to said corresponding one of said semiconductor dice.

Claim 19 (previously presented): The process according to claim 13, wherein said wire bonding further comprises ground wire bonding each of said semiconductor dice to a corresponding ground pad on said substrate array.

Claim 20 (previously presented): The process according to claim 13, wherein said mounting said collapsible spacers comprises mounting a collapsible spacer array to said substrate array.

Claim 21 (previously presented): The process according to claim 13, wherein said mounting said collapsible spacers comprises mounting a collapsible spacer array to said heat spreader array.

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Claim 22 (previously presented): The process according to claim 19, wherein mounting said collapsible spacers further comprises mounting a respective one of said collapsible spacers to each of said plurality of die adapters.

Claim 23 (previously presented): The process according to claim 22, wherein said collapsible spacers are disposed between said die adapters and said heat spreader array and in contact with said die adapters and heat spreader array during molding.

Claims 24 - 29 (canceled).

Claim 30 (previously presented): The process according to claim 1, wherein said mounting at least one collapsible spacer comprises mounting a solder preform to at least one of said heat spreader, said die adapter and said substrate.

Claim 31 (previously presented): The process according to claim 1, wherein said mounting at least one collapsible spacer comprises mounting substantially spherical collapsible balls to at least one of said heat spreader, said die adapter and said substrate.

Claim 32 (previously presented): The process according to claim 1, wherein said mounting at least one collapsible spacer comprises mounting substantially spherical collapsible solder balls to at least one of said heat spreader, said die adapter and said substrate.

Claim 33 (previously presented): The process according to claim 13, wherein said mounting a plurality of collapsible spacers comprises mounting a solder preform array to at least one of said heat spreader array, said die adapters and said substrate

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array.

Claim 34 (previously presented): The process according to claim 13, wherein said mounting a plurality of collapsible spacers comprises mounting substantially spherical collapsible balls to at least one of said heat spreader array, said die adapters and said substrate array.

Claim 35 (previously presented): The process according to claim 13, wherein said mounting at least one collapsible spacer array comprises mounting substantially spherical collapsible solder balls to at least one of said heat spreader array, said die adapters and said substrate array.